Background
As part of my minor field study (MFS) during 2010, I lived, studied and participated in the village of Niubasaga, Fiji. I worked with the community to create a space for reflection and innovation, which resulted in the construction of a community center. The project involved everyone in the community and was designed using forms of indigenous knowledge. The resulting space was built to respect the local environment and building codes. During this time, I worked in a participatory manner with the community. The project involved everyone in the community, and I became more aware of the culture and how development can be a threat to values found within the Fijian culture.

Research Area
Small Island Developing States (SIDS) face unique challenges in achieving sustainable development due to their specific context. These small islands are in need of socio-cultural context and individual confidence to support sustainable development. The findings from my research have been attached to whatever aspects of life do not comply with the Fijian culture. This proposal aims to incorporate local resources, values and solutions within the indigenous community into the design, with the purpose of generating spaces suitable for the specific situation. By analyzing the social and physical context of this island, the aim is to build principles of sustainability into future design projects.

Framework
Consensus and relevance to the indigenous community are necessary for successful design. Resource management and participation are required to develop solutions to the existing development backlog. The aim of the project is to develop a participatory design process, with the purpose of generating spaces suitable for the specific situation. By analyzing the social and physical context of this island, the aim is to build principles of sustainability into future design projects.

Fiji and Development
Fiji is a small island developing state with unique challenges in achieving sustainable development due to its specific context. These small islands are in need of socio-cultural context and individual confidence to support sustainable development. This proposal aims to incorporate local resources, values and solutions within the indigenous community into the design, with the purpose of generating spaces suitable for the specific situation. By analyzing the social and physical context of this island, the aim is to build principles of sustainability into future design projects.

Social Change & Development
This project builds upon Aurasia Rentier’s notions of developing and changing which argue that: “Development which starts with pacification and education by the missionaries has blurred the bonds of traditional commitment and social responsibility, producing new degrees of individualism and dependence. It has created free social economic and political structures and institutions which have either superceded or superseded themselves on these already existing. This created a situation in which concepts of “uncivilized”, “primitive”, “colonized”, “underdeveloped”, “non-industrialized” or “partially commercial” which have been attached to whatever aspects of life do not comply with the Fijian culture. The people have been reminded often that they are poor, oppressed and underdeveloped.”

Niubasaga village
Site plan 1:500

Between-ness
A Community Center
Building within an indigenous framework
Niubasaga village, Fiji Islands.

Anna Sandberg, Thesis project/08/05/2011
Contextual Space Studio/Dick Sandberg & Pål Röjgård

“Va is the space between, the between-ness, not empty space, not space that separates but space that relates, that holds separate entities and things together in the unity-in-all, the space that is context, giving meaning to things. A well known Samoan expression is ‘Ia leu va’, cherishing/care for the va, the relationships. This is crucial in communal cultures that value group, unity, and more than the individual person/creature/ thing in terms of group, in terms of va, relationships.”

Albert Wendt

Between-ness: A Community Center
Building within an indigenous framework
Niubasaga village, Fiji Islands.
The Context

Mapping the Culture—"Vanua" the people, the relations and place.

Vanua the land
Vanua has a physical, social and cultural dimension which are interrelated. Vanua meaning "land" talks about the physical land, which then host four subdivisions: gardening land, forest land, founding ancestor’s house sites and folding area.

Vinuus the people
Vinuus (land) also means “tribe”, the people of the land. It holds the sense of belonging to a place, the confidence and security of existence. For a village to exist it must have people living there, supporting and protecting the land.

Niubasaga, Clan and social units (kinship)
Clan (Vinuus; clan groups), family and kinship groups are highly connected, with great emphasis placed on the status of land and culture. Here the ancestors are the center of the clan. The individual group identifies with the clan, and is the clan, itself. A clan uses symbols to identify itself, and is linked geographically, culturally and emotionally. In Niubasaga there are 3 prefixes, clan and 3 examples, social units of the clan. The managerial level is called the Bili, or clan.

Working closely are the clan criteria. These are the people. One’s responsibilities and obligations towards the same are based on the social group. The clan is in a society. The clan is both a group, affected and affected by its members. It is the clan that directly affects the individual. The family is the communal unit, and clan (Vinuus; clan groups), its group.

Niubasaga, Spatial concepts in the village
Since the late 18th century the river has changed the landscape of the village, the river has cut through the village, the houses have adapted, and the population of the village has changed. The changes have been due to the river changing. In the early days the village was on the river, the river has cut through the river, the houses have adapted.

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The Context

Mapping: Resources within the Vinuus

Manuila

Eco-system interaction

Materials

Wood, Bone, Shell, Coral, etc.

Tree species

Large trees

Vines

Vines include; climbing vines, ivy vines, woody plants

Birch

Birch refers to the birch tree that has been cut down in the village. It is typically used as a source of wood for fuel.

Post Box

Post box refers to the post box that has been cut down in the village. It is typically used as a source of wood for fuel.

Vanua

Vanua refers to the land that has been used in the village. It is typically used as a source of wood for fuel.

Men’s section

Men’s section refers to the men who have been in the village. It is typically used as a source of wood for fuel.

Mata

Mata refers to the land that has been used in the village. It is typically used as a source of wood for fuel.

Fish

Fish includes; salmon, tuna, mackerel, etc.

Food & essences

Moringa, Lime, etc.

Historical location

Manners and culture

Manners and culture refer to the way of life in the village. It is typically used as a source of wood for fuel.

Typical Fijian bure, Division & organization

Typical Fijian bure, Visual connection

The center of the house is above a cake, the place has clear visual connection towards different doors.

Typical Fijian bure, Indoor climate

The base of the house is below a cake, the place has clear visual connection towards different doors.

Diagram of village spaces

The diagram shows the houses and their location. The village and most spaces are marked. Some spaces, including the main house and work space, are shown. The village and most spaces are marked. The houses are marked with a line on the bottom and a dot.

Mud Brick (Adobe)

Mud Brick (Adobe) also known as adobe. It is an ancient building material which is still used today. It is made from clay, sand, and water. The bricks are formed with a mold and then dried in the open air. The mud brick is a sustainable building material because it can be broken down into the natural materials used to make it.

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As Niubasaga is a chiefly village, numerous meetings and ceremonies such as presenting a sevusevu (gifts) to the chief, giving to others or the other women groups on Moturiki for fundraisers and knowledge spreading.

Each village has a women’s group that works together, cooks together and help each other. They have weekly meetings to plan their events. The group also meet all the other women groups on Moturiki for discussions and knowledge sharing.

As Moturiki is an island where a lot of research is performed, but little is shared among the communities. A small library collection is needed. The collection will serve as well as provide a space for them, away from family chores.

The Fijian tradition of storytelling, talanoa, can be translated to face-to-face conversation, and creating a space for talanoa sessions can revive the traditional knowledge as a part of a modern society.

The village will be more protected from cyclones and storms by replanting mangrove patches, while leaving some sight lines and entry points. Mangroves breaking the waves.

Resource Center

Study room

A quiet place for the children on the brightest day with sufficient lighting. Today they do their homework if the family have enough kerosene for light. The toilet block will be converted into a shop and dispensary.

Film/Presentations

The center can be used for the women’s meetings. The space can be used to show films or presentations with a projector.

New Entrance

The village will be more protected from cyclones and storms by replanting mangrove patches, while leaving some sight lines and entry points. Natural sea walls can be planted with mangroves. Seedlings can be re-vegetated after and if 3-10 yrs they have gained full size and help the soil build up and protect the essential areas, whilst also creating a fish nursery.

2030

By 2030 the residents will have more 51 cm (on average) mangroves planted as a natural protection and a communities rebuilding bunds, etc. It is possible to generate a large scale planting, especially in communities with existing traditional " taboo areas” marine reserves. While establishing the traditional marine reserves, species that can contribute to small scale fishing (small fish, macoro trevally) will once be protected. The mangroves also function as a fish nursery as well as storm protection and filter for the sea.

Climate change adaptation strategy

Today

The village is being held on the edge of the tidal flat. The back of the village is in the low tide, slowly eroding land that can only be on the tidal flat. Two parts of the coastline are potentially eroded. It is really bad but those from the villages have not seen such waves in recent years until now.

2050

Planted mangroves patches are being grown. The waves have been calmed down due to the mangroves and the sky becomes clear. It is possible to build up bunds and other structures, to protect the village. All women groups are happy and live as usual.
Project Process
A scenario
My initial idea and aspiration was to work in a participatory method with the community throughout the project. However, the distance combined with unstable communication, and the time limitation of this project has restricted carrying out the same work process as when in Niubasaga.

Reference project
Handmade School in Bangladesh by Anna Heringer and Eike Roswag has used similar work process in development. The building process involved the locals, and extra training was given to achieve the school structure.

Building the Proposal
Reference to prior projects
Building on the experiences from the Eco-toilet project. The structure was made from local materials and adapted local building techniques. Five toilets have been made so far, including the first prototype.

Invitation to Niubasaga
This took on village level on behalf of Niubasaga.

Visiting the vanua
Presenting ideas, outlining the project, and engaging with representatives and trust from the community.

Village meeting
Calling a meeting to discuss the project, explaining the ideas and vision. Further discussions to create greater communication, vision and possibilities. Each group makes their action plan.

Skill building
Involving experts in advice for workshops. Professor Joeli Veitayaki, head of marine studies at the University of South Pacific teaches the village about their marine environment.

Planting the mangrove
Workshop for the youth, learning about the mangrove plant and its importance. Moving and planting seedlings on the tidal flat, in 8-10 years they will protect the shore and create a soil build up.

External actors
Skill building
External professionals
Local council
Working partners for funding

Women’s Group
• Planning kitchen
• Building a temporary kitchen inside
• Making mats for interiors
• Preparing food for the village
• Fliers

Men’s Group
• Gather materials
• Traditional building workshops, traditional methods and techniques workshops to expand village skills
• Involving skilled men from the island
• Building the structure, frames, roof and screens.

Youth Group
• Establishing learning workshops
• Planning the resource center
• Planning workshops
• Learning building skills

Reference project
Handmade School in Bangladesh by Anna Heringer and Eike Roswag has used similar work process in development. The building process involved the locals, and extra training was given to achieve the school structure.

Building kitchen
As the women will cater for all events, the communal kitchen can be built first to be used during the project.

Resource Center
Story telling and study rooms.

Niubasaga public square
Section perspective of shop and community center. Existing Church in background 1:25.
Flexible spaces
The expandable walls allow space to grow to accommodate for the different activities.

Outcome
What can the new community center generate for Niubasaga

Making decisions for the future
With the new community center they would have a space to get organised. Here meetings that do not collide with other village activities. They would easily cook together in the large kitchen and become more efficient in their work. Community efforts would give them more time to dedicate new money generating projects, which they would also have a designated space for.

For the youth group, the community center would improve their building skills, strengthen their local knowledge and improve their community work practices for making. The community center encourages indigenous knowldege to be shared in a standard format.

This community can be a generator for financial stability. This can occur in the fishing village. From fishing and selling the produce to markets in Suva and Nadi, the community can engage in sustainable village industries. The openable windows and doors are also made. This community is one of the largest industry in Fiji, and Niubasaga being close to tourist spots, they could make more of it. It has already fostered sustainable small businesses practices for women as they currently have few options to make money.

Larger gatherings
For celebrations, birthdays, funerals, wedding, or meetings, the hall can open up and host more people.

Examples on sustainable business that the community center can host.
Selling handicrafts
The center could market themselves with their produce to nearby tourist spots, both selling the produce and the activity. This type of business would improve the sustainability and generate local knowledge.

Crab farming
This task can be used for crab farming to increase sales. The women could sell crabs and make money. They could make them larger crabs nearing maturation. The women could market themselves with their crabs to markets, the larger the crabs, the more money they get. Fattening smaller crabs with food scraps to make them adult. 4 weeks, after 3 months they have increased in size and ready for sale.